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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,679	04/20/2001	Gary J. Sullivan	MS1-601US	1812

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EXAMINER

CZEKAJ, DAVID J

ART UNIT	PAPER NUMBER
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2621

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	01/24/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 01/24/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

lhptoms@leehayes.com

Office Action Summary

Application No.

09/839,679

Applicant(s)

SULLIVAN, GARY J.

Examiner

Dave Czekaj

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

On page 10, applicant argues that MacInnis does not disclose an application interface. While the applicant's points are understood, the examiner respectfully disagrees. See for example MacInnis column 57, lines 20-35. There MacInnis discloses the accelerator is programmable so that it can meet new and evolving application requirements, indicating an application interface is present. Therefore the rejection has been maintained.

On page 11, applicant argues that MacInnis fails to disclose generating one or more filter control command data structures. While the applicant's points are understood, the examiner respectfully disagrees. See for example MacInnis column 57, lines 30-35. There MacInnis discloses performing blending, scaling, blitting, and filling. The examiner notes that blending, scaling, blitting, and filling perform functions of a filter, that is, they modify the appearance of the image. Therefore the rejection has been maintained.

On page 11, applicant argues that the motivation is too general. While the applicant's points are understood, the examiner respectfully disagrees. Sriram discloses in column 2, lines 59-64, that a need exists within the prior art for an efficient decoder being flexible and functional. Therefore, the teachings of Sriram applied to the decoder of MacInnis provides a decoder which can easily and effectively facilitate the use of multiple processors. Therefore the rejection has been maintained.

On page 11, applicant argues that the modification would change the principle of operation. While the applicant's points are understood, the examiner respectfully disagrees. While a general overview of the references has been given, the principle of operation has not been identified. Therefore the rejection has been maintained.

On page 13, applicant argues that Sriram fails to disclose wherein the API is not specific to any particular application or accelerator. While the applicant's points are understood, the examiner respectfully disagrees. See for example Sriram column 8, lines 1-10. There Sriram discloses the monitor process, or API, dynamically decides that data to send to each application. The examiner notes that since this process is done dynamically, the monitor process, or API, is not specific to any of the individual applications or sub-processes. Therefore the rejection has been maintained.

On page 14, applicant argues that Sriram fails to disclose iteratively issuing configuration commands reflecting the alternative degrees and methods of decoding capability until choosing one that is acceptable to both the decoder and accelerator. While the applicant's points are understood, the examiner respectfully disagrees. See for example Sriram column 6 line 58- column 6, line 30. There Sriram discloses the process of argument passing. Argument passing is performed so that all data needed at a particular level is accessible to that level. Therefore, the commands, or requests, are iteratively received/sent for data so the decoder and accelerator and perform the necessary processing. Therefore the rejection has been maintained.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

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Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 10 and 11 are rejected under 35 U.S.C. 101 because the claims do not meet the 35 U.S.C. 101 requirements (the claims have improper language regarding the Computer-readable media). Please see the USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" Annex IV in the Computer-Related Nonstatutory Subject Matter section. The examiner suggests changing media in claim 10, to memory media and changing more processors in claim 11 to more computers.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacInnis et al. (6744472), (hereinafter referred to as "MacInnis") in view of Sriram et al. (6539059), (hereinafter referred to as "Sriram").

Regarding claims 1-2, 10-12, and 24-25, MacInnis discloses an apparatus that relates to an integrated circuit graphics display system (MacInnis: column 1, lines 41-43). This apparatus comprises "receiving a command from a decoder application" (MacInnis: figure 2, item 50, wherein the decoder application is the video decoder) and "generating one or more filter control command data structures recognizable by a

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communicatively coupled accelerator including one or more parameters which affect one or more filter settings of the accelerator" (MacInnis: figure 2, column 57, lines 21-37, wherein the filter parameters are the blending, scaling, blitting, and filling, the accelerator is the graphics accelerator). Although MacInnis fails to explicitly show an application interface in MacInnis's figures, the examiner notes that the system depicted in figure 1 would require an interface to correctly operate. MacInnis further fails to show the API configured to facilitate the use of a plurality of accelerators. Sriram teaches that there is a need for an efficiently scalable decoder which facilitates efficiency, synchronization, flexibility and functionality (Sriram: column 2, lines 59-64). To help alleviate this problem, Sriram discloses an API that "is configured to facilitate the use of a plurality of different multimedia accelerators with the decoder application" (Sriram: column 4, lines 48-54, wherein the accelerators are the sub-processors; column 7, lines 10-14, column 8, lines 1-14, wherein the interface or API is the monitor processor) and Therefore, the combined teaching of MacInnis and Sriram as a whole would have rendered obvious to one having ordinary skill in the art at the time the invention was made to implement an API configuration taught by Sriram in order to obtain an apparatus that is more versatile by being able to correctly and effectively facilitate the use between multiple processors of a system.

Regarding claims 3, and 20, MacInnis discloses "the filter is a post-processing filter" (MacInnis: figure 28).

Regarding claim 4, MacInnis discloses "output data subsequent to the application of a post-processing filter are used as prediction references" (MacInnis: column 3, lines

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54-55, wherein prediction references are well known within the MPEG environment).

Regarding claims 5, 14, and 21, MacInnis discloses "the post processing filter is a de-ringing filter" (MacInnis: column 9, lines 52-58, wherein low pass filtering requires the signal to be de-rung).

Regarding claims 6-7, 17, and 23, MacInnis discloses "the parameters include a strength parameter" (MacInnis: column 4, lines 40-51, wherein the strength parameter is the scaling).

Regarding claims 8-9, 15-16, and 22, MacInnis discloses "the API issues control commands for 4 or 16 luminance structures and/or 2, 4, 8, 16, or 32 chrominance structures" (MacInnis: column 9, lines 34-44, wherein the YUV converter uses the above chrominance and luminance structures).

Regarding claim 13, MacInnis discloses "the filter control structures effect one or more of the post processing filters" (MacInnis: figure 2, column 57, lines 21-37, wherein the filter structures indicate whether to blend, scale, blitte, and/or fill).

Regarding claim 18, note the examiners rejection for claim 1, and in addition, Sriram discloses "wherein the decoder application is configured to iteratively issue configuration commands reflecting various decoding acceleration capabilities until choosing one that is acceptable to both the decoder and accelerator" (Sriram: column 5, lines 58-67, column 12, lines 59-63, wherein the configuration commands is the parameter passing).

Regarding claim 19, MacInnis in view of Sriram disclose "one ore more media accelerators coupled to the decoder application via the API" (MacInnis: figures 1-2,

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wherein the accelerator is the graphics accelerator, the decoder application is the video decoder; Sriram: column 7, lines 10-14, column 8, lines 1-14).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave Czekaj whose telephone number is (571) 272-7327. The examiner can normally be reached on Mon-Thurs and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DJC

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TC 2600